

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claim 14 is rejected under 35 U.S.C. 101 because the claimed invention is direct to non-statutory subject matter as follows. Claim 14 defines a computer program product embodying function description material. However, the claimed does not define a non-transitory computer-readable medium or memory and is thus non-statutory for that reason (i.e., "when functional descriptive material is recorded on some non-transitory computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized"- Guidelines Annex IV). That is, the scope of the presently claimed a computer program product can range from paper on which the program is written, to a program simply contemplated and memorized by a person.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-6, 8-12 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Godwin et al. (US Patent No. 7,020,894 B1).

In considering claim 1, Godwin et al discloses all the claimed subject matter, note 1) the claimed receiving an audio signal and a video signal is met by the video input 200 and the audio input 240 (Fig. 2, col. 6, line 34 to col. 7, line 16), 2) the claimed providing the audio signal to a loudspeaker (112, 212, 312) is met by the displays 291 or 195 which inherent includes the loudspeaker (Fig. 2, col. 7, line 60 to col. 8, line 23), 3) the claimed analyzing the audio signal, including identifying at least one aural event from the audio signal is met by the comparator 250 which detects a respective burst of 6KHz in the received audio signal (Fig. 2, col. 7, lines 3-31), 4) the claimed providing the video signal to a display unit (114, 206, 306) is met by the displays 291 or 195 (Fig. 2, col. 7, line 60 to col. 8, line 23), 5) the claimed analyzing the video signal, including identifying at least one visual event from the video signal is met by the comparator 220 which detects when the level in the video test signal as received change from black to peak white level (Fig. 2, col. 6, line 37 to col. 7, line 2), 6) the claimed associating the aural event with the visual event, including calculating a time difference between the aural event and the visual event is met by the main timer 280 (Fig. 2, col. 7, line 25 to col. 8, line 24), and 7) the claimed applying a delay on at least one of the audio signal and the video signal, the value of which delay being dependent on the calculated time difference between the aural event and the visual event, thereby synchronizing the audio output and the video output is met by the automatic delay compensation (Figs. 2 and 4, col. 7, line 32 to col. 67).

In considering claim 2, the claimed in which the step of analyzing the video signal is performed subsequent to any video processing of the signal is met by the timing generator 210 (Fig. 2, col. 6, line 42 to col. 7, line 2).

In considering claim 3, the claimed in which the step of analyzing the audio signal is performed subsequent to the audio signal being emitted by the loudspeaker and received via a microphone (122, 222) is met by the microphone (col. 9, line 53 to col. 10, line 24).

In considering claim 4, the claimed in which the audio signal and the video signal comprise a test signal having substantially simultaneous visual and aural events is met by the video test signal 122 and the audio test signal 144 (Fig. 1, col. 4, line 43 to col. 5, line 40).

In considering claim 5, the claimed further comprising the step of storing the value of the delay is met by col. 8, lines 18-24.

In considering claim 6, the claimed wherein stored delay values are associated with information regarding a respective source of the audio and video signal is met by col. 8, lines 18-24.

Claim 8 is rejected for the same reason as discussed in claim 1 above.

Claim 9 is rejected for the same reason as discussed in claim 1 above.

Claim 10 is rejected for the same reason as discussed in claim 2 above.

Claim 11 is rejected for the same reason as discussed in claim 3 above.

Claim 12 is rejected for the same reason as discussed in claim 5 above.

Claim 14 is rejected for the same reason as discussed in claim 1 above.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Godwin et al. (US Patent No. 7,020,894 B1) in view of Daniel Baker et al. (EP Patent No. 1 357 759 A1).

In considering claim 7, Godwin et al teach all the limitations of the instant invention as discussed in claims 1 and 5-6 above, except for providing the claimed further comprising the steps of: receiving identification information regarding a source of the audio signal and the video signal, and associating the delay value with the information regarding the source of the audio and video signal.

Daniel Baker et al teach that the decoder/delay device 26 includes a source ID decoder 28 into which the selected source identified video signal is input and an adjustable audio delay device 30 into which the audio signal is input, the source ID decoder 28 extracts the source ID from the selected source identified video signal, based on the source ID the decoder 28 accesses a look-up table 30 to select a pre-determined delay value corresponding to the camera identified by such source ID (Fig. 1, col. 2, paragraph #0009).

Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to incorporate the source ID as taught by Daniel Baker et al into Godwin

Art Unit: 2622

et al's system in order to automatically lip sync error correction using an embedded video source identifier to control an adjustable audio delay.

Claim 13 is rejected for the same reason as discussed in claim 7 above.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Stanger (US Pub No. 2004/0100582 A1) discloses method and apparatus for lipsync measurement and correction.

Cooper (US Patent No. 7,499,104 B2) discloses method and apparatus for determining relative timing of image and associated information.

Cooper (US Patent No. 6,836,295 B1) discloses audio to video timing measurement for MPEG type television systems.

Silver (US Patent No. 5,387,943) discloses semiautomatic lip sync recovery system.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trang U. Tran whose telephone number is (571) 272-7358. The examiner can normally be reached on 9:00 AM - 6:30 PM, Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on (571) 272-7372. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2622

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

April 14, 2010

/Trang U. Tran/
Primary Examiner, Art Unit 2622